Claims

What is claimed is:

1. A method for controlling a clutch pressure during a power shift, comprising steps of:

a.) changing a pressure in the clutch over a predetermined first time interval, while calculating a ratio of an input speed on an input side of the clutch to output speed on an output side of the clutch at predetermined second time intervals shorter than the first interval, for determining if the clutch is slipping; and

b.) adjusting a rate of the changing of the pressure as a function of determined clutch slippage.

2. The method of claim 1, wherein the first time interval is from about 0.1 to about 0.15 second, and the second time intervals are each from about 0.01 to about 0.015 seconds.

3. The method of claim 1, wherein the clutch is an off-going clutch and the pressure therein is decreasing.

4. The method of claim 1, wherein the clutch is an on-coming clutch and the pressure therein is increasing.

5. The method of claim 1, comprising the additional steps of:

c.) changing a pressure in a second clutch over the predetermined first time interval, while calculating a ratio of an input speed on an input side of the clutch to output speed on an output side of the

clutch at predetermined second time intervals shorter than the first interval, for determining presence of slippage; and

d.) adjusting a rate of the changing of the pressure in the second clutch as a function of the determined clutch slippage.

6. The method of claim 1, wherein the calculated ratio is compared with a theoretical ratio to determine the clutch slippage.

7. The method of claim 1, wherein the clutch is an off-going clutch and the pressure therein is decreasing and the rate of decrease in the pressure therein is increased when clutch slippage is present.

8. The method of claim 1, wherein the clutch is an on-coming clutch and the pressure therein is increasing and the rate of increase in the pressure therein is increased when clutch slippage is present.

9. The method of claim 1, wherein the clutch is an off-going clutch and the pressure therein is decreased during the shift and the rate of the decrease is changed as a function of the determined clutch slippage.

10. The method of claim 1, wherein the clutch is an on-coming clutch and the pressure therein is increased during the shift and the rate of the increase is changed as a function of the determined clutch slippage.